

ABSTRACT

Despite the continuous improvement of the prior-art restraint systems severe/fatal injuries of passengers, restrained thereby, are increasing in accidents due to submarining, three-point seat belts, capable of restraining only one shoulder, or lap seat belts of aeroplanes, incapable of restraining the upper part of the body and head [4, 5], and impact of their heads with aeroplane- or vehicle interiors such as steering wheel [7] or window pane [8], thus resulting in head- and organ injuries [6, 9].

In the principle feature of invention survival chance for babies, children and adults in accidents of vehicles, trains or aeroplanes or in turbulence-related vibrations of aeroplanes is enhanced when the upper part of body of a passenger and his shoulders are restrained by extending both shoulder-belt portions (1.1, 1.2) of a multi-point, one-piece seat belt (1) crosswise in an X-shape and his lower part of body is restrained when plug-in connecting a latch plate (2), easily accessed by the passenger, to a buckle assembly (4) and a latch plate (9) to a buckle assembly (9.1).

In the second feature the X-shaped restraint is accomplished by a belt-feeding device when the passenger takes his seat.

In the third feature both thighs are restrained by two lap-belt portions (1.3R, 1.3L) when plug-in connecting a latch plate (11) to a buckle assembly (8).

In the fourth feature, for the convenience of passenger or in cases of emergency all latch plates are disengaged when pressing a master release button (84) of the buckle assembly (9.1).

OTHER PUBLICATIONS

[1] Report "Fahrzeugsicherheit 90" by Institut für Fahrzeugsicherheit in München

[2] Car-Magazine AMS (Auto Motor und Sport) 2/94, 10/94, 6/95, 17/95, 19/95, 20/95, 25/95, 8/96, 14/96, 10/97, 15/97, 19/97, 20/97, 21/97

[3] Car-Magazine AMS 21/97

[4] Car-Magazine AMS 19/95, 20/97

[5] Car-Magazine AMS 19/91

[6] Police accident report and medical reports of court case regarding instant death of a 39 years-old driver, 40 years-old co-driver and 11 years-old child in a German car, crashed by another German car on a rural road, due to massive brain injuries, fracture of skulls, ribs, shanks, femurs, rupture of aortas, livers, spleens, kidneys etc.

[7] Police accident report and photos documenting the steering wheel and -column totally deformed by the head, thrown forward, of a 34 years-old driver of a brand-new German luxury car.

[8] Police accident report and newspaper documenting the instant death of a 21 years-old female driver in a German car, crashing into a larger German car on an urban road, due to the head impact with the window pane.

[9] 34-page report by Go concerning severe/fatal injuries, submarining, head impacts and whiplash resulted from failure of conventional seat belts etc. to four German Ministers, General Attorney, Vice General Attorney, Chief Attorneys, Police Chief Directors, Police Directors, Police Chiefs etc.